

ABSTRACT OF THE DISCLOSURE

A digital electrochemical sensor is provided with a sensor electrode array (1-4) and an operating electronic unit integrated on a chip for processing electrical signals received therefrom. The operating electronic unit includes a potentiostat circuit and a microprocessor, which receives and further processes the signals processed by the operating electronic unit. To provide an electrochemical sensor which can be operated more simply and with higher precision during installation and in operation the potentiostat circuit is a digital circuit, whose controller function is controlled by the microprocessor (20), and for the microprocessor (20) to be also integrated on the chip of the operating electronic unit.